Electronic Version
Stylesheet Version v1.1.1

Claims

[c1] What is claimed is:

1.A method for accessing a variable memory of an optical disk drive comprising following steps:

(a)utilizing the optical disk drive to read data of an optical disk and identifying the type of the data;

(b)if the type of the data is CD data, arranging reading variables from an initial address of the variable memory; and

(c)if the type of the data is DVD data, arranging reading variables from the initial address of the variable memory.

[c2] 2.The method of claim 1 wherein the CD data type is CDDA, VCD, CD-ROM, CD-R, or CD-RW, and the DVD data type is DVD-ROM, DVD-R, DVD-RW, DVD+R, DVD+RW, or DVD-RAM.

[c3] 3.The method of claim 1 wherein the reading variables in step (b) or (c) are related to content of the optical disc.

[c4] 4.The method of claim 1 wherein when the optical disk drive stores the reading variablesin step (b) or (c) in the variable memory, the reading variablesreplace reading variables of a last-inserted optical disk stored in the ini-

tial address of the variable memory.

[c5] 5.The method of claim 1 further comprising storing common reading variables necessary for the optical disk drive to access the optical disk into the variable memory, wherein the common reading variablesincludedrive configuration, status, or tray status.

[c6] 6.The method of claim 5 wherein the common reading variables stored in the variable memory will not bereplaced.

[c7] 7.An optical disk drive for performing the method of claim 1.

[c8] 8.A method for accessing a variable memory of an optical disk drive comprising following steps:
(a)utilizing the optical disk drive to read data of a DVD and identifying the type of the data;
(b)if the type of the data is DVD-ROM data, arranging reading variables from an initial address of the variable memory;and
(c)if the type of the data is DVD-RAM data, arranging reading variables from theinitial address of the variable memory.

[c9] 9.The method of claim 8 wherein when the optical disk drive stores the reading variables in step (b) or (c) in the

variable memory, the reading variablesreplace reading variables of a last-inserted optical disk stored in the initialaddress in the variable memory.

[c10] 10. The method of claim 8 further comprising storing common reading variables necessary for the optical disk drive to access the optical disk into the variable memory, wherein the common reading variables includedrive configuration, status, or tray status.

[c11] 11.The method of claim 10 wherein the common reading variables stored in the variable memory will not bereplaced.

[c12] 12.An optical disk drive for performing the method of claim 8.

[c13] 13.A method for accessing a variable memory of an optical disk drive comprising following steps:
(a)utilizing the optical disk drive to read and write data of an optical disk and identifying the type of the data;
(b)if the type of the data is recordable CD data, arranging writing variables from a first initialaddress of the variable memory; and
(c)if the type of the data is DVD data, arranging writing variables from the first initialaddress of the variable memory.

[c14] 14.The method of claim 13 wherein the recordable CD data type is CD-R or CD-RW, and the DVD data type is DVD-R, DVD-RW, DVD+R, DVD+RW, or DVD-RAM.

[c15] 15.The method of claim 13 wherein when the optical disk drive stores the writing variablesin step (b) or (c) in the variable memory, the writing variablesreplace writing variables of a last-inserted optical disk stored in the first initial address in the variable memory.

[c16] 16.The method of claim 13 further comprising:
if the type of the data is recordable CD data, arranging reading variables from a second initialaddress of the variable memory; and
if the type of the data is DVD data, arranging reading variables from the second initialaddress of the variable memory.

[c17] 17.The method of claim 16 wherein the first and second initial addresses are different.

[c18] 18.An optical disk drive for performing the method of claim 13.